



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,173	08/25/2003	Chang-Hung Lee	5234-0170PUS1	4453
2292	7590	11/29/2007		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER BATES, KEVIN T	
			ART UNIT 2153	PAPER NUMBER
			NOTIFICATION DATE 11/29/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/648,173

Applicant(s)

LEE ET AL.

Examiner

Kevin Bates

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Office Action is in response to a communication made on October 24, 2007.

Claims 1 and 12 have been amended.

Claims 1-37 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 35 - 37 rejected under 35 U.S.C. 102(b) as being anticipated by
Norris (5557749).**

Regarding claim 35, Norris teaches a data processing method for data processing system, the data processing system communicating with a plurality of data processing systems and having a look up table for storing a plurality of records relative to compressing methods used respectively and previously between the data processing system (Column 5, lines 54 – 60), the method comprising: a target data processing system is recorded in a record of the look up table (Column 5, lines 29 – 31; the routing table); transmitting an inquiring signal to the target data processing system if there is no record corresponding to the target data processing system in the look up table (Column 5, lines 18 – 21); receiving a response signal from the data processing system (Column 5, lines 21 – 26); performing a data process on a transmitting data according to the

Art Unit: 2153

response signal (Column 5, lines 26 – 31); and recording the data process and a device identification number of the target data processing system in the look up table (Column 5, lines 29 – 31).

Regarding claim 36, Norris teaches the data processing method of claim 35, the method further comprising: if a compressing method corresponding to the target data processing system is recorded in the look up table, compressing the transmitting data with the data compressing procedure (Column 5, lines 54 – 60).

Regarding claim 37, Norris teaches the data processing method of claim 35, wherein the response signal comprises information about whether to proceed data compressing or not and a corresponding compressing method (Column 5, lines 32 – 42).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engwer (6947483) in view of Norris(5557749).

Regarding claims 1 and 24, Engwer teaches a data processing system applying in a wireless local areas network (WLAN) (Column 1, lines 20 – 24), the WLAN comprising a plurality of data receiving/transmitting apparatus (Column 4, lines 16 – 20),

Art Unit: 2153

the system at least being set up in a first data receiving/transmitting apparatus to let the first data receiving/transmitting apparatus proceed the received or transmitting data (Column 4, lines 42 – 45; lines 50 – 55), the system comprising:

- a transmitting device for processing the transmitting data transmitted to a second data receiving/transmitting apparatus (Column 4, lines 50 – 55), the transmitting device comprising:

- a control module for determining a corresponding data compressing policy before the transmitting data being transmitted to the second data receiving/transmitting apparatus (Column 5, lines 55 – 59); and

- a data compressing module for compressing the transmitting data according to a data compressing method which is assigned by the control module (Column 7, lines 13 – 15); and

- a receiving device for processing a receiving data, the receiving device comprising:

- an identity module for identifying the data compressing method of the received data (Column 7, lines 7 – 12); and

- a data decompressing module for decompressing the received data according to the data compressing method which is identified by the identity module (Column 7, lines 7 – 12).

Engwer does not explicitly indicate a look up table, when the data processing system transmitting data to the plurality of data receiving/transmitting apparatus, for recording the data compressing method used previously and an identification number

corresponding to each of the plurality of data receiving/transmitting apparatus; and where the control module determines compressing policy according to the record of the second data receiving/transmitting apparatus in the look up table.

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a compression method between a sender and a receiver (Column 5, lines 19 – 26), storing the negotiated compression method in a look-up or routing table (Column 5, lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claim 12, Engwer teaches a data processing method of wireless local areas network (WLAN) (Column 1, lines 20 – 24), the WLAN comprises pluralities of data receiving/transmitting apparatus (Column 4, lines 16 – 20), the processing method processes a transmitting data at least in one data receiving/transmitting apparatus, for following up with transmitting the transmitting data to a target data receiving/transmitting apparatus of the WLAN (Column 4, lines 42 – 45; lines 50 – 55) the data processing method comprises;

determining a corresponding data compressing policy according to the record of the target data receiving/transmitting apparatus before the transmitting data being transmitted to the target data receiving/transmitting apparatus (Column 5, lines 55 – 59); and

compressing the transmitting data according to a data compressing method recorded in the data compressing policy (Column 7, lines 13 – 15).

Engwer does not explicitly indicate the data receiving/transmitting apparatus comprises a look up table, the look up table comprising a plurality of data records for recording the data compressing method used previously and an identification number corresponding to each of the plurality of data receiving/transmitting apparatus when the data processing system transmitting data to the plurality of data receiving/transmitting apparatus,

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a compression method between a sender and a receiver (Column 5, lines 19 – 26), storing the negotiated compression method in a look-up or routing table (Column 5, lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to

improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 2, 14, and 25, Engwer teaches the data processing system of claims 1, 12, and 24, wherein the data compressing policy comprises:

if the data compressing method used by the second data receiving/transmitting apparatus is known, the control module notifying the data compressing module to compress the data according to the data compressing method recorded in the look up table (Column 12, lines 9 – 18); and

if the data compressing method used by the second data receiving/transmitting apparatus is not known, the control module determining a process to negotiate with the second data receiving/transmitting apparatus by a predetermined inquiring procedure (Column 6, line 66 – Column 7, line 4).

Engwer does not explicitly indicate that the apparatus uses a look up table to determine whether the apparatus knows if the second apparatus can use compression.

Norris teaching a routing table that includes the information of whether a compression method has been negotiated between the sender and a receiver (Column 5, lines 53 – 65)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 3, 15, and 26, Engwer teaches the data processing system of claims 2, 14, and 25, wherein the inquiring procedure comprises; transmitting an inquiring signal to the second data receiving/transmitting apparatus (Column 6, line 66 – Column 7, line 4); waiting for a response signal responded by the second data receiving/transmitting apparatus (Column 7, lines 12 – 15); and proceeding a predetermined responding processing procedure in a predetermined waiting period, for following up with transmitting the data (Column 7, lines 12 – 15, where the AP sends out the test packet to the MU and operates as the MU cannot handle the compressed data unless a response packet in a compressed format is received).

Regarding claims 4, 16, and 27, Engwer teaches the data processing system of claims 3, 15, and 26, wherein the response signal comprises following responding information: whether the transmitting data should be compressed; and the data compressing method being used when the transmitting data should be compressed (Column 7, lines 12 – 15, where the AP sends out the test packet to the MU and operates as the MU cannot handle the compressed data unless a response packet in a compressed format is received).

Regarding claims 5, 17, and 28, Engwer teaches the data processing system of claims 4, 15, and 27, wherein the responding processing procedure comprises: if receiving the response signal in the predetermined waiting period, then processing the transmitting data according to the responding information of the response signal; and if not receiving the response signal in the predetermined waiting period, then directly transmitting the transmitting data without compressing (Column 7, lines 12 – 15, where

the AP sends out the test packet to the MU and operates as the MU cannot handle the compressed data unless a response packet in a compressed format is received).

Regarding claims 6, 18, and 29, Engwer teaches the data processing system of claims 5, 17, and 28, wherein, when the responding information of the response signal shows unnecessary to proceed the data compression, the control module notifies the data compressing module not to proceed the compressing procedure, and transmits the transmitting data directly (Column 7, lines 12 – 15, where the AP sends out the test packet to the MU and operates as the MU cannot handle the compressed data unless a response packet in a compressed format is received).

Regarding claims 7, 19, and 30, Engwer teaches the data processing system of claims 5, 17, and 28, wherein, when the responding information of the response signal (Column 7, lines 12 – 15) shows necessary to proceed the data compression, the apparatus creates a record of the MU's ability to compress data and its compression scheme (Column 12, lines 9 – 17).

Engwer does not explicitly indicate the look up table creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of data compression, and the information of the corresponding data compressing method into the look up table.

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a compression method between a sender and a receiver (Column 5, lines 19 – 26), storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 8, 20, and 31, Engwer teaches the data processing system of claims 5, 17, and 28, wherein, when the responding information of the response signal shows unnecessary to proceed the data compression, a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of unnecessarily proceeding data compression (Column 12, lines 9 – 17, where the AP keeps track of each MU and whether they have shown no compression abilities).

Engwer does not explicitly indicate the look up table creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of data compression, and the information of the corresponding data compressing method into the look up table.

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a compression method between a sender and a receiver (Column 5, lines 19 – 26), storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 9, 21, and 32, Engwer teaches the data processing system of claims 5, 17, and 28, wherein, if not receiving the responding data in the predetermined waiting period (Column 7, lines 12 – 15, where the AP sends a test packet to inform the MU that it can handle compressed packets, after that the AP assumes the MU cannot handle compressed packets until a response in a compressed format is received from the MU), the apparatus creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of unnecessarily proceeding data compression (Column 12, lines 9 – 17, where the AP keeps track of each MU and whether they have shown no compression abilities).

Engwer does not explicitly indicate the look up table creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of data compression, and the information of the corresponding data compressing method into the look up table.

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a

Art Unit: 2153

compression method between a sender and a receiver (Column 5, lines 19 – 26), storing the negotiated compression method in a look-up or routing table (Column 5, lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 10, 22, and 33, Engwer teaches the data processing system of claims 1, 12, and 24, the data compressing method is to compress the transmitting data during performing the data packet packaging procedure (Column 7, lines 7 – 12).

Regarding claims 11, 23, and 34, Engwer teaches the data processing system of claims 10, 22, and 33.

Engwer does not explicitly indicate wherein the data compressing method is to proceed the loss-less compression with the transmitting data by the data compressing method of ZIP or LZH.

Norris teaches that the LAN compression method can be ZIP (Column 2, line 24) or LZH (Column 1, lines 35 – 37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' lossless compression methods in Engwer's teaching

in order to use well known in the art compression methods that LAN devices and WLAN devices are likely to support.

Regarding claim 13, Engwer teaches the data processing method of claim 12, wherein the transmitting data comprises a header and a main data (Column 7, lines 7 – 10).

Response to Arguments

The applicant argues that Norris does not teach recording a data compressing method used previously. The examiner disagrees, as shown in Norris in Column 5, lines 14 – 31, during the first communication between a client and a server, the compression method is negotiated and logged within the routing table. The logged compression method is then used for the communication between the client and server. The next time a connection needs to be made between the same client and server the previously used compression method that has been logged within the routing table is determined and used for the communication, as shown in Column 6, lines 12 – 22. Thus this shows that look up table only uses compression methods that have been previously used.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

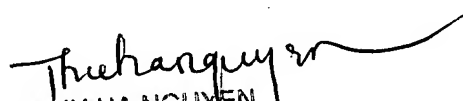
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RT BT

Kevin Bates
November 14, 2007


THU HA NGUYEN
PRIMARY EXAMINER